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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,623	10/05/2000	Maki Yukawa	2257-163P	8138

7590 03/12/2004

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EXAMINER
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TRAN, KHANH C

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/679,623

Applicant(s)

YUKAWA, MAKI

Examiner

Khanh Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 October 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 8-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/05/2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. Figures 22-23 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. U.S. Patent 6,504,826 B1.

Regarding claim 1, in column 1 line 15 through column 2 line 41, Kato et al. discloses in figure 1 a conventional digital broadcasting receiver 100 comprising an input terminal 101 through which a digital broadcast signal is received, a receiving unit 11, a de-multiplexing unit 12, memory unit 13, analyzing control unit 13, decoding unit 15, On Screen Display (OSD) synthesizing unit 16.

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The analyzing control unit 14 controls the de-multiplexed unit 12 to obtain the information about the channel selected by the input digital information from viewer input.

Kato et al. does not expressly disclose parameter set means for setting said program parameter as claimed in the patent application. However, applicant discloses in the specification on page 14 lines 18-23, and in figure 1, a controller 13 serves as parameter means for setting the program parameter in response to user input for a specific program. In light of the foregoing disclosure, it would have been obvious for one of ordinary skill in the art at the time the invention was made that the analyzing control unit 14 as taught by Kato et al. performs the same function of the controller 13 as claimed in the patent application. Furthermore, as recited above, the analyzing control unit 14 controls the de-multiplexed unit 12 by setting control information associated with the selected channel. The control information describing information of a broadcast channel is used as information for selecting the channel and is included in the digital information.

Using analogous argument, one of ordinary skill in the art will appreciate that de-multiplexed unit 12 as taught by Kato et al. is similar to the signal extraction means as claimed in the instant application. The de-multiplexed unit 12 extracts image/audio/additional data and control information from input multiplexed digital information based on control information set by the analyzing control unit 14. The control information corresponds to the program parameter as claimed.

Kato et al. does not expressly disclose the analyzing control unit 14 of the conventional receiver 100 detects the content change of the information table as

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claimed. However, when a viewer selects a program channel, the control information corresponding to selected channel is set. One of ordinary skill in the art will appreciate that the viewer selection of a channel corresponds to a predetermined criterion as claimed. Furthermore, it would have been obvious for one of ordinary skill in the art at the time the invention was made that the analyzing control unit 14 as taught by Kato et al. detects the control information of selected channel, corresponding to content change of said information table as claimed, and controls the de-multiplexer unit 12 to obtain the information about channel.

Regarding claim 2, Kato et al. does not expressly disclose the analyzing control unit 14 monitoring the contents of information table every predetermined time. Nevertheless, the analyzing control unit 14 continue analyze received information data and responds to any viewer selection input. It would have been obvious for one of ordinary skill in the art at the time of the invention that monitoring changes every predetermined time is a design choice. Furthermore, as recited above, the predetermined criterion corresponds to a viewer selection input, and presence/absence of content change of the information table would correspond to the viewer selecting or not selecting a program channel.

Regarding claim 3, as well known in the art of digital broadcasting, the information table inherently includes a program clock reference (PCR) which is a reference time information associating with each video stream. Kato et al. does not

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expressly disclose the analyzing control unit 14 monitoring discontinuity of said PCR.

Using analogous argument as in claim 2, by monitoring the received information data for

any change, the analyzing control unit 14 indirectly monitors discontinuity of the PCR

since each video/audio stream has different PCR. As recited in claim 2,

presence/absence of content change due to channel selection corresponds to

presence/absence of discontinuity of the PCR.

Regarding claim 6, Kato et al. further discloses an EPG is generated based on acquired program information stored in the memory unit 13. Hence, digital broadcast signal includes an EPG shows a schedule for a broadcasted program. Since the analyzing control unit 14 analyzes the control information of the acquired program information stored in the memory unit 13, the analyzing control unit 14 would recognize an end time of currently received program as shown in the EPG. The viewer, corresponding to a predetermined criterion, would determine whether or not the end time of a program.

Regarding claim 7, the conventional digital broadcasting receiver includes an input terminal 101 for receiving digital broadcast signal directly from outside.

***Allowable Subject Matter***

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3. Claims 4-5 and 8-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fukushima et al. U.S. Patent 6,477,204 B1 discloses "Video Image Decoding Method and Apparatus".

Sonoda et al. U.S. Patent 6,557,171 B1 discloses a digital TV broadcast sending/receiving system.

Yanagihara et al. U.S. Patent 5,899,578 discloses "Digital Signal Processor, Processing Method, Digital Signal Recording/Playback Device and Digital Signal Playback Method".

Lert, Jr. et al. U.S. Patent 4,230,990 discloses "Broadcast Program Identification Method and System".

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 703-305-2384. The examiner can normally be reached on Tuesday - Friday from 08:00 AM - 05:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KCT

TESFALCZ, EUGENE  
PRIMARY EXAMINER